Cloudy reality

Our rapidly transforming world is awaiting even more significant changes, often unpredictable and hard to understand. Expectations that terrify us most concern destructive consequences of crumbling environment caused by natural events and intensive human activities. Every new day makes it all the more obvious that pursuing exponential consumption of material goods and services is bringing closer the 'pay day' in the form of climatic and other cataclysms.

One of possible ways of preventing apocalyptic scenarios requires not only abolition of excessive consumption and production but also transition to other services and products including those based on digital technologies. However, this does not fully eliminate problems of waste utilization and environmental impact despite reduced demand for materials from new technologies. Environmental problems seem to be inseparable from our social life.

It appears very significant that digital technologies allow reducing traditional costs at various stages of manufacture, transportation and consumption of products and services (from production and sales to transactions including various coordinating procedures of interacting economic agents). They also create a basis to form other economic and social reality.

The idea of shaping a new reality based on radically new technologies (first automation and later digitalization) has been around for decades. In literature it produced utopias and science fiction (we can't help remembering Isaac Asimov who in January of 2020 could have been 100 years old). These 'historic' expectations of the last decades were amplified by explosive proliferation of digital technologies.

In production sphere, digitalization found particular expression in new production cycles – flexible, small scale and quick to respond to changing demand for products and services (self-adapting). Thus, in China only in the period of 2014–2018 over $14.5 billion were invested into smart manufacturing projects (and the next step is 'deeper integration of digital technologies in traditional manufacturing, especially in auxiliary and sustaining processes…

This shift brought about a rise of labor productivity of 37% and cut current costs by 21%)*.

The retail has also changed thanks to opportunities offered by latest technologies of storing and processing data (not just search of a product or service you need but also purchase and selection of optimal delivery).

There are brand new services and products too – this is especially clear when one looks at the media market (in its broadest sense, not just latest news but also music, cinema, books and various computer entertainment – the number of computer game enthusiasts already vastly exceeds those that prefer traditional games) (the paper by P.N. Teslia).

All this is shaping another, let's call it, 'cloudy' reality – the one that is now impacting perceptions of employment, choice of place to live, living conditions and consequently value systems of people.

It seems that quite soon a new dazzling and shining world of 'cloud nine' future where the core of consumption will be latest media products and where 'digits' set the rhythm of life and relationship between people (the paper by L. Ye. Dobrinskaya).

Alas, such dreams are far from becoming real. To create, support and develop the digital world one needs real resources (material, financial and human) that are indispensible for operation of its technical, intellectual and creative components (the paper by N.A. Ganitchev and O.B. Koshovets).

Our spiritual, cultural and social life will yet long remain grounded on fundamental values and principles of social existence as our activities will target maximum benefits from invested resources and efforts.

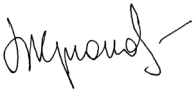
That's why the reform of state and public management built exclusively on latest digital technologies without adjusting internal procedures and interaction mechanisms between participants of socio-economic processes has rather limited impact. Yes, it is possible to shape a technically efficient system of document flow that informs citizens about their duties and opportunities (the paper by A.N. Shvetsov and V.N. Rysina). Unfortunately, it is difficult to fathom why and how despite digitalization of the public

* Ma Si Ministry sets out upgrading strategy. – China Daily, December, 13, 2018. – china-daily.com.cn/business

administrative management (on the level and in the context of latest global trends) the number of public employees is rapidly increasing. Why do the advanced digital technologies in public managements improve our lives so insignificantly?

It is not possible to create modern digital technologies and processes without prior development of a complex network of various hi tech devices and software. Unfortunately, in Russia all rosy expectations in this field are mostly based on application or insignificant modernization) of products and solutions created abroad and not on expansion and development of national technologies, skills and competencies. Of course, there are several brilliant examples of outstanding products of highest global level such as Yandex browser, map navigator 2GIS, Kaspersky antivirus system. Alas, from the point of view of employment or revenue generation the domestic manufacturers of digital products and technologies are not in the same league as companies of traditional sectors and spheres of economy.

On the whole, 'cloudy ' reality appears to be a logical stage in the evolution of material-technological foundation and composition of the society that formed earlier. We believe it is too early to say that digital technologies are capable to radically transform the socio-economic reality. Without cardinal changes in development of scientific-technological bases of traditional production as well as without social and transport infrastructure adequate to modern challenges we can only speak about niches, nooks, nomad camps and digital administration of the state and society. For this reason the cloud nine pictures that we see before us seem nothing but dreams stretching beyond clouds. Presumably, one's dreams are especially far-reaching when you are barred from the world by earphones listening to and watching high-quality readily accessible media products. This is very effective for developing imagination but has nothing to do with resolving vital problems of growing scientific-technological backwardness.

Editor-in-chief of ECO  KRYUKOV V.A.